ABSTRACT

A communications adapter is provided for interfacing between a master device and an I/O device (body) having an output and/or an input. In the case of the I/O body having an output, the adapter has a TCP port for coupling to the master device via a transmission path for receiving a request message. The adapter also has a connector for operable coupling to the I/O device for receiving the output of the I/O device. The adapter further has an interface circuit operably connected to the TCP port and the connector for transmitting a response message over the transmission path in response to the request message, the response message correlating to the output received from the I/O device. The request message and the response message is limited to a length that is less than a TCP transaction length and/or a maximum transmission unit limit, or both, depending on the embodiment of the present invention.

A method is also provided to create a connection between a master device and an I/O device having an output and/or and input. In the case of the method for providing a connection between a master device and an I/O device having an output, the method includes receiving over a transmission path a request message on a preregistered TCP port selected from a plurality of TCP ports. The method also includes receiving the output from the I/O device. The method further includes transmitting a response message over the transmission path in response to the request message, the response message correlating to the output of the I/O device. The request message and/or the response message is limited to a length that is less than both a TCP transaction length and/or a maximum transmission unit limit, or both, depending on the embodiment of the present invention.